



CommercePeople

JULY/AUGUST 1991

U.S. DEPARTMENT OF COMMERCE

When it comes to the future of American technology, Under Secretary for Technology Robert White can't be accused of reticence.

"The technology environment is filled with billowing storm clouds charged with electricity, serving as a lightening rod to focus this energy," White says. "In nearly every product and service, the importance of technology is growing. Technological innovation has accelerated to unprecedented levels and has become increasingly complex, integrated, costly and time-sensitive. Our

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TECHNOLOGY ADMINISTRATION

Inside Commerce

by Erika Morphy

Aerodynamics, Ballistics and Baseball," a new display in the lobby of the NIST Research Information Center features experiments that determine whether pitched baseballs curve. The experiments were done by Director of National Bureau of Standards (NBS) Emeritus Lyman Briggs from 1957 through 1959 (NBS was renamed the National Institute of Standards and Technology in 1987 under the Omnibus Trade Act). Briggs investigated the relationship of spin to deflection at different speeds. He studied the problem because of his interest in the flight of low-speed missiles and also because he was an ardent baseball fan. Briggs' research was conducted off-hours in NBS laboratories and at Griffith Stadium. At the stadium he enlisted the help of several members of Washington's baseball team, the Washington Senators. The display consists of text, photographs, and artifacts that include peanuts, crackerjacks, several of the baseballs that were pitched, and baseball cards of the players who assisted Briggs. The display will be up until December.

The Combined Federal Campaign presented an excellence award to the Baltimore National Weather Service office for having achieved close to 70 percent of their employee giving potential — they ranked 10th out of 280 agencies in the Baltimore area in terms of giving potential based on salary. For the past 12 years, the office has achieved 100 percent participation and 100 percent of their goal.

Craig Hammond, former NOAA special agent in charge of the Enforcement Office in Alaska was recognized by the Alaska legislature for outstanding service. Prior to his retirement last fall, Hammond also received a distinguished public service award from the Coast Guard.



After two years of planning, the Census Alumni Association is now a reality. Its first event, scheduled for Oct. 11, will be a reunion at the Suitland, Md., Census headquarters. Information will be mailed to all Census retirees by midsummer. Members of the Census Alumni board of directors seated left to right: Ed Goldfield, Jack Keane, Dorothy Armstrong. Standing left to right: Bob Hagan, Ezilda Gorman, Jerry Coopers, Dan Levine, and Irene White.

Marilyn Jacox, a NIST Fellow in the Physics Laboratory, was selected by Women in Science and Engineering (WISE) as the recipient of the 1991 WISE Lifetime Achievement Award. Jacox was honored for her outstanding professional achievements and for her accomplishments in promoting the advancement of women in science and engineering. Through her experiments in matrix isolation spectroscopy, Jacox has made major contributions to understanding the structure, reactivity and properties of transient chemical species — research of vital importance in such fields as the structure and dynamics of the atmosphere, rocketry and the production of chemicals. March was a winning month for Jacox, who also received the 1990 Hillebrand Prize of the Chemical Society of Washington.

Mark Wayne Hall, an electronics technician with the National Weather Service and a 30-year veteran with the Boy Scouts of America, has been

awarded the Silver Beaver Award. The award is the highest honor for a volunteer scout leader. Hall received the award at the Boy Scouts of America's 70th Annual Banquet held in Baton Rouge.

NIST research chemist Joseph Antonucci received the 1990 Wilmer Souder Award of the International Association of Dental Research. The award is sponsored in memory of Wilmer Souder, former physicist and noted dental materials researcher at NIST. Established in 1955, the award confers the highest honor in the field of dental materials research upon scientists who, through their research, bring about outstanding advances in dental health. Antonucci was cited for developing new types of polymer-based dental composite restoratives, cements and adhesives. His research in these and related areas has influenced the development and commercialization of new dental materials.

The Technology Administration

TA In Its Third Year

Continued from cover

mission is to assist U.S. industry by acting as a focal point for technology policy and by acting as a catalyst and facilitator to improve their competitiveness."

Confirmed just over a year ago, White arrived with a plan. "I want TA to be a place where industry can come to bring its issues, raise questions, and catalyze American industry to become more aggressive," he said at his swearing-in. "I want TA to be known as a leader for change and a place where industry can look at us as their ally in government." TA was created in 1988 by legislation sponsored by Sen. Ernest Hollings (D-S.C.), and given a budget of \$4.5 million. It combined the Office of the Assistant Secretary for Technology Policy with the National Institute for Standards and Technology and the National Technical Information Service. TA's mission is to develop and promote a federal technology program that increases commercial innovation and growth, to serve as the central point for developing science and technology policies, and to work with the private sector to remove barriers to commercialization. The under secretary for technology also is the secretary's principal adviser on science and technology.

Once formed, TA quickly went to work.

A report on Emerging Technologies was published in early 1990 by the agency, identifying 12 technologies that reflect the international science and technology community's consensus of promising fields with large potential impact. The report also compares U.S. technological advances with those of Japan and the EC.

Through NIST, TA funded the establishment of two new Manufacturing Technology Centers in Ann Arbor, Mich., and Kansas City, Kan. The centers are designed to introduce American manufacturers to the latest in manufacturing technologies.

The Commerce, Defense and Energy Departments, together with NASA, signed a memorandum of understanding to work cooperatively to establish a uniform Product Data Exchange (PDES). The exchange will allow companies to eliminate the need for costly and time-consuming translation of product design from blueprints to computer-aided design/computer-aided manufacturing, creating a paperless flow of design and manufacturing information between companies.

The Advanced Technology Program (ATP), designed to stimulate the development of pre-competitive and generic technologies and the formation of research

consortia, awarded \$10 million to 11 projects in its first round of grants. The FY 1991 ATP budget includes \$36 million for the second round of grants expected to be awarded later this year.

TA's Office of Technology Commercialization (OTC), within the Office of the Assistant Secretary for Technology Policy, stepped up attempts to commercialize research done in the federal government's own laboratories and to help small manufacturers take advantage of new technologies. "OTC is there to help turn technology potential into product reality," says Director Joseph Allen.

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One of OTC's components is the Advanced Manufacturing Program, which works with national and regional organizations to introduce the most current technology to America's small and medium-size manufacturers. Program Manager Theodore Lettes is working with organizations across the nation to establish flexible, computer-integrated manufacturing centers (FCIMs) that can be shared by small manufacturers. FCIMs allow firms to take advantage of the latest technology and to train their employees on the equipment prior to undertaking a major capital investment on their own. So far, Lettes has assisted in the establishment of seven operational centers and is working on 20 more.

Since its debut, the Commerce Department's newest agency has established vital programs to improve American competitiveness in international markets. "I am proud of what we have accomplished, and am hopeful that we can build upon the solid foundation of our early successes," says White.

NTIS: Putting Out the Scientific Word

This year alone, the federal government is spending \$72 billion on research and development projects conducted in over 700 federal laboratories around the country.

That R&D produces a lot of information to digest in the march of science, and National Technical Information Service (NTIS) Director Joseph Caponio likes to see taxpayers make the most of information they have already paid for.

"Having the right information at the right time," says Caponio, "is an invaluable asset for business. By actively working to collect and disseminate the information in its collection, NTIS plays a vital role in helping U.S. businesses remain internationally competitive."

NTIS' mission is to collect, organize and disseminate information produced by the United States and foreign governments. With over two million items, NTIS is a supermarket of scientific leads.

Last year NTIS added 68,000 new titles to its collection. The center's files include complete technical reports of the 60,000 research studies performed each year at such federal agencies as the Defense Department, National Aeronautics and Space Administration, National Institutes of Health, and the Energy Department. Reports from government contractors are also included in NTIS' collection, as well as reports from more than 20 industrial powers, including Japan, Germany, the USSR, India, and the Eastern European countries. Also found in NTIS' document collection are maps produced by the Central

Intelligence Agency — considered to be among the most detailed and accurate maps available. During the Persian Gulf War, CNN, the Detroit News Service, and NBC's Today show used these maps.

NTIS also publishes directories, catalogues, monthly fact sheets, semi-monthly newsletters with abstracts of developments in 26 specialty areas, and weekly lists of government inventions available for licensing. One of the center's most helpful products is the Directory of Federal Laboratory and Technology Resources. Users can look up almost any subject and be directed to federal labs working in that field. For instance, if you have pest control problems and don't want to use chemicals, look under "Insect Control" and find the Beneficial Insects Research Laboratory in Newark, Del., where Agriculture Department scientists look for good bugs that kill bad bugs.

Or maybe you want to know the effect of various energy-producing technologies on arid land ecosystems. According to the directory, the Energy Department's Laboratory of Biomedical and Environmental Sciences in Los Angeles is working on it.

Ordered formed in 1945 by President Truman to distribute declassified World War II documents, NTIS for years has been a self-supporting agency, financed by sales of its information products. In 1973 it became the first government agency to accept credit cards. Today computerized programs and reports constitute the fastest-growing segment of its product line.

Supported by its customers, NTIS has begun to implement a number of quality management initiatives to identify and serve customers' needs. "Many of the ideas and initiatives have come directly from NTIS employees," said Caponio. "NTIS is very proud of its people."

NTIS' 341 employees work at its northern Virginia industrial park headquarters cataloguing and selling such esoteric reports as "Conceptual Design Study for a Mirror Fusion Breeder," and "Magnetic Islands Created by Resonant Helical Windings." More than 75 percent of the employees are actively involved in some type of quality improvement project.

"The contributions our employees make to serving customers' needs will certainly place NTIS in a leadership position in the future," Caponio said. "We feel they are contributing positively to international competitiveness, and are active participants in what has become known as the Information Age."

Burnette Patillo
doublechecks
forms in the
Identification
Section.



NTIS Leads Federal Patent Licensing Activities

Each year hundreds of federal laboratories develop new technologies that are in the process of being patented. This creates property rights which the government can license to industry as an incentive to develop commercial products and processes.

NTIS' Office of Federal Patent Licensing coordinates this process by negotiating royalty-bearing licenses for a number of federal agencies. Depending on the technology and market conditions, exclusive, partial exclusive or non-exclusive licenses are available.

"Anyone may apply for a license," says Stephen Gates, director of the licensing program. "Our office provides the application form, a copy of the regulations covering licensing and a flyer explaining the process. But if applicants have questions about the application process, we are more than willing to talk to them on a personal basis."

In the last ten years, NTIS granted 259 non-exclusive licenses and 194 exclusive licenses. Two noteworthy non-exclusive licenses were for inventions from the National Institutes of Health: an Acquired Immune Deficiency Syndrome test kit, and a hepatitis B vaccine.

This year 941 federal inventions in 21 different subject areas were described in the Catalog of Government Inventions Available for Licensing. Someone with aspirations, for instance, in the agribusiness industry would discover inside the catalogue such gems as the patent

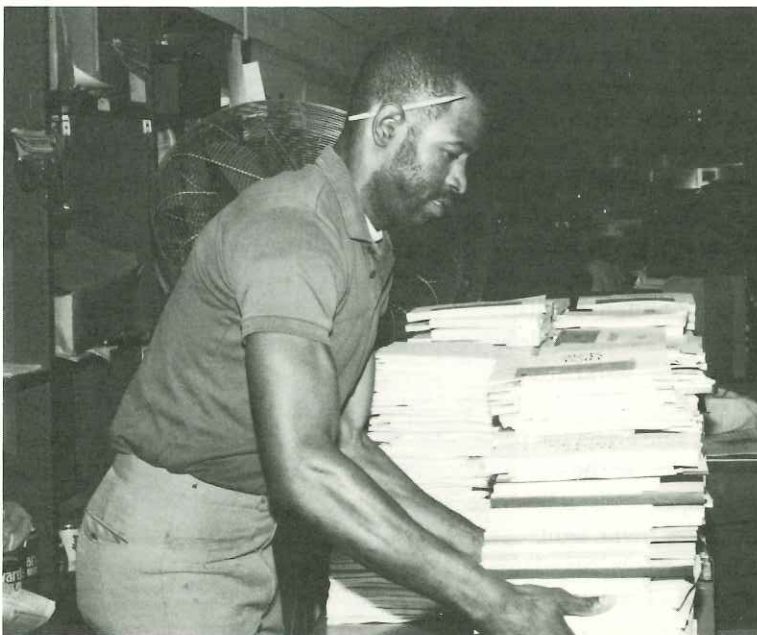
application for "Insect Detection Using a Pitfall Probe Trap Having Vibration Detection," or the application for the "Method for Classifying Wheat Kernels as Hard or Soft." A printer looking for an alternate printing process which doesn't use as much petroleum as the traditional methods should beat a path

to the NTIS licensing office. The government has developed a vegetable oil-based printing ink, waiting to be licensed by a would-be entrepreneur.

"The availability of federal patent licenses is an incentive to the private sector for developing commercial products and processes," says Gates.



Betty Bumbrey organizes paperwork in the Document Storage Section.



Mike Puryear working in the Shipping and Receiving Section.

Anyone interested in obtaining a licensing application and copies of the regulations should contact: Office of Federal Patent Licensing, NTIS, P.O. Box 1432, Springfield, Va. 22151, (703) 487-4738.

NIST: Its Exactitude Helping the U.S. Compete

It would be hard to find a federal agency whose work is less noticed but has a bigger impact on daily lives than the National Institute of Standards and Technology.

Headquartered in Gaithersburg, Md., with an annual budget of \$350 million and a staff of more than 3,100, NIST has the job of setting national standards of measurement — the precise time, the exact length of a meter, the flow in a gasoline pump, the quality of steel in an automobile. They are all determined by NIST.

Today there are few functions not affected by NIST standards. They are everywhere, from the moment a day begins. When a clock radio sounds off in the morning, NIST is there. The time displayed ultimately comes from a battery of atomic clocks at the institute's Boulder, Colo., branch. Elsewhere in the house, there is more evidence of NIST standards at work. NIST has "standard water," which can be used to compare local water for contamination. There is also standard cement, standard brick, even a standard magnetic tape. In the kitchen, NIST standards are in every cabinet. There are not only basic standards for the composition of what should be found in foods— wheat flour, rice flour — there are also standards for pesticides contaminating the foods. In Los Angeles County, NIST sets the pace of the drive to work because the agency's radio station, WWVB, sends signals that synchronize traffic lights along critical traffic corridors. Standards are a floor of orderliness beneath modern industrial living.



NIST provides companies with the methods to measure dimensions and properties of semiconductors. Here, Materials Research Engineer Wen Tseng uses molecular beam epitaxy to grow and study the properties of thin films of semiconductor compounds.

Spurring Innovation

Besides keeping national standards of measurement, NIST is also one of the lead agencies in a new federal effort to help industries compete in high-tech markets.

NIST conducts research programs in selected areas of public health, safety, environment and fundamental sciences to improve the knowledge base that technological progress is built upon. As the primary federal laboratory with the explicit mission of aiding U.S. industry, NIST has been a behind-the-scenes partner for industry and academia, providing the means to foster technological advances and economic progress. Several NIST programs spur innovation and accelerate the adoption of new ideas and technology by U.S. companies.

One of them, the Advanced Technology Program, awards U.S. businesses grants to carry out research and development on precompetitive, generic

technologies, and to develop revolutionary new products. The ATP recently announced its first \$10 million in grants to 11 consortiums, joint ventures and individual companies. The technologies included manufacturing techniques for electronics, such as x-ray lithography; optical recording; a variety of hardware and software technology for computers; high-temperature superconductivity; machine tool control; and novel laser designs.

Another example of NIST's behind-the-scenes partnership with the business sector is its regional Manufacturing Technology Center (MTCs) program. Through these non-profit centers, NIST provides technical and financial support to small and mid-sized companies in gaining expertise in new manufacturing technologies. The centers disseminate scientific, engineering, technical and management information about manufacturing to individual firms located within their regions.

A Partner With Private Industry

To further aid businesses in building a competitive advantage, NIST makes available its research and testing facilities. Among them are a 20-megawatt research reactor with a cold neutron facility, a metals processing laboratory, an automated manufacturing research facility, and a computer network and security facility. Two new options available to U.S. businesses have been added to the list: a video supercomputer research facility and a materials research instrument.

The new research facility built around a video supercomputer studies the signal-processing techniques needed for future high-performance computer displays and video-imaging systems. The facility features a "Princeton Engine" video computer created by the David Sarnoff Research Center in Princeton, N.J. The Princeton Engine at NIST is the third built by the Sarnoff center since the original machine was unveiled two years ago. While a typical desktop computer uses a single microprocessor chip to accomplish its tasks, the

Princeton Engine uses 1,024 microprocessor chips.

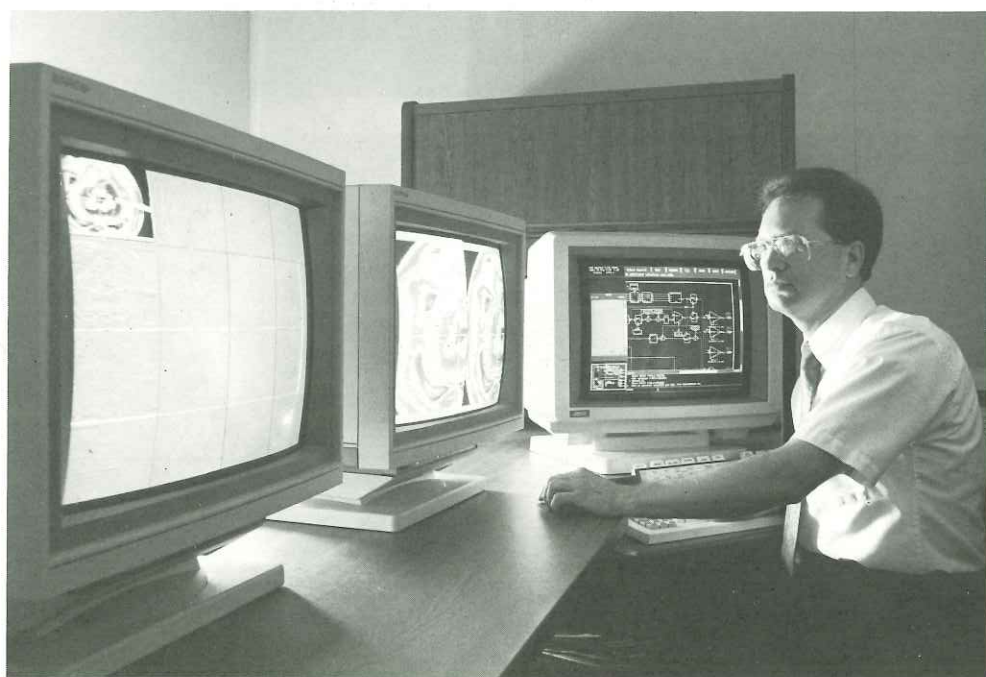
The engine is the first computer to merge video with a supercomputer so fast that it can perform complex calculations on each of the more than 1.2 million points in a high-resolution video screen and still display the resulting image in "real time." The \$1.5 million machine was funded by the Defense Advanced Research Projects Agency (DARPA) as part of a larger program to develop improved imaging systems for advanced tanks and aircraft, defense mapping, command and control communications, advanced materials research, and other military applications.

Research managers from industry, government, and academia recently inaugurated the first private sector-sponsored advanced materials research instrument — a high resolution neutron spectrometer — to take advantage of the new cold neutron NIST laboratory. A spectrometer measures the angle and intensity at which neutrons bounce or are scattered from test samples. The instrument yields detailed information on the atomic and molecular structure over an exceptionally broad range of samples.

Designed and built in a joint venture of NIST, Exxon Research & Engineering Co. and the University of Minnesota's Center for Interfacial Engineering, the \$1.5 million spectrometer can observe atomic and molecular structures in bulk materials over an exceptionally broad range of sizes.

Known formally as a "Thirty-meter small-angle neutron scattering spectrometer" or SANS, this instrument is a fundamental tool of modern materials research, offering an unparalleled glimpse into the atomic and molecular structures of ceramics and other advanced materials. The new SANS is considered among the world's best, and is the first very high resolution SANS available to U.S. scientists, according to NIST officials.

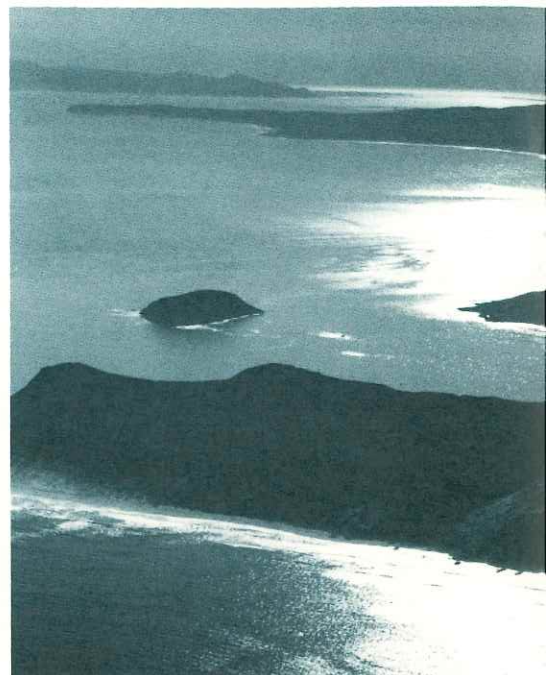
With modern technology, extremely fine scale measurements have become as easy to make as weighing yourself on a bathroom scale. But SANS represents more than just another advance in modern technology. According to NIST Director John Lyons, the collaboration "exemplifies the new model for NIST interactions with the private sector in support of industrial competitiveness."



NIST researcher Bruce Field uses the Princeton Engine video supercomputer to demonstrate the compression of electronic signals generating these images of the ozone hole over Antarctica.

The Beauty of Channel Islands Captured on Film

A 1,252 square mile portion of the waters surrounding Anacapa, Santa Rosa, Santa Cruz, San Miguel, and Santa Barbara islands makes up Southern California's Channel Island National Marine Sanctuary. Administered by NOAA, the sanctuary and the Channel Islands National Park combine to provide protection to an extraordinary combination of land and sea. The Channel Islands region is one of a select number of marine areas in the country that have been given this protected status because of their natural and cultural significance. These marine sanctuaries are the aquatic counterpart of our National Parks.



San Miguel Island, with Santa Cruz and Santa Rosa



*North side of Santa Cruz Island. Santa Rosa Island is visible on the horizon.
Photo by W. Dewey.*



Seattle-based photographer Chris Huss, shot of two ochrestars lounging on a shallow reef off San Miguel Island won the grand prize in the second annual Sea Center Photography Contest.



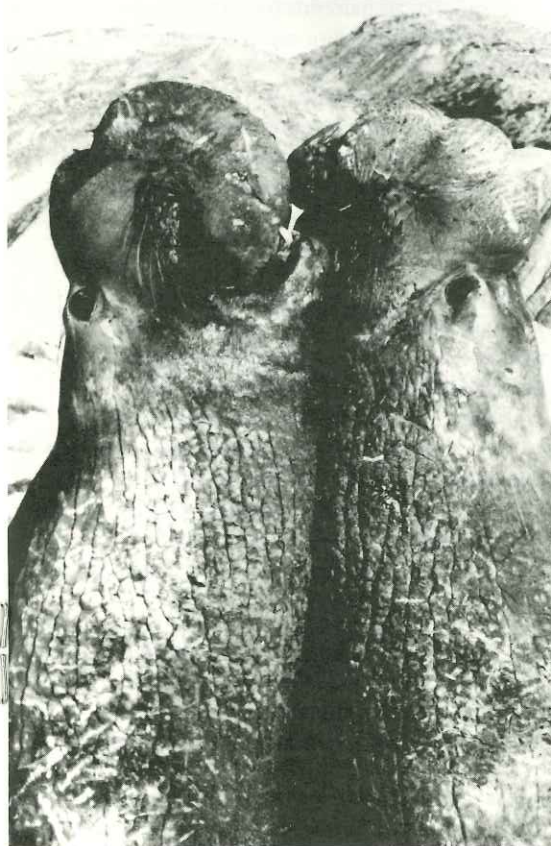
*A glimpse of a goby fish through the carcass of a sea urchin.
Photo by Susan Speck.*



Islands in the distance. Photo by W. Dewey.



Underwater closeup of an Anemone Mine. Photo by Glenn Pollock.



Two of the Bull Elephant Seals that inhabit San Miguel Island.



J.C. Leacock won first place in the topside division with his view of elephant seals lazing in the late afternoon sun on San Miguel Island.



A diver approaches a fish with a torpedo ray. Photo by Jim Perry.

The Men Who Found Drinker Nisti

By Amanda Renzi

It's 135 million years ago, in what will one day be called Wyoming. A herd of dinosaurs splashes through the shallow waters of a swamp, feeding on plant life. Suddenly, a primitive crocodile rises from the water and lunges for the smallest, a pigeon-sized infant. The attacker misses, and the baby scampers to its turkey-sized mother as the herd flees to safety.

The swamp has long dried to dust and rocks, but the players are still there — turned to fossilized bone. Their story is still unfolding. Until recently, odd bones found from these herds of turkey-sized dinosaurs mystified paleontologists, who had never uncovered a truly telltale find.

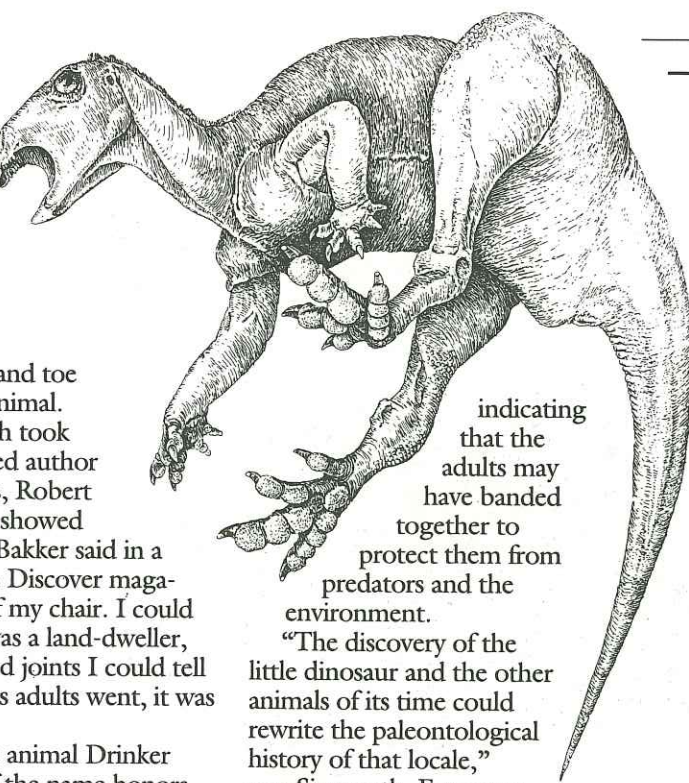
One spring day in 1989, however, two amateur paleontologists from Boulder, Colo., — NIST Chemical Engineer James Filla and James Siegwarth, a NIST physicist who develops instrumentation for the space program — began digging in a southern Wyoming quarry and found several

intriguing vertebrae and toe bones from a small animal.

Filla and Siegwarth took their find to the famed author of *Dinosaur Heresies*, Robert Bakker. "When they showed me what they had," Bakker said in a recent interview with *Discover* magazine, "I nearly fell off my chair. I could tell that the animal was a land-dweller, and by its well-formed joints I could tell it was an adult. But as adults went, it was damn tiny."

Bakker named the animal Drinker Nisti: the first part of the name honors Drinker Cope, a pioneering paleontologist, and the second part is named after NIST — the first dinosaur to be named after a federal agency. A few months later, Bakker discovered another quarry in Wyoming, which contained 40 of the small dinosaurs.

The animal stood almost 60 centimeters (two feet) high, was nearly two meters (six feet) long from the tip of its nose to the end of its tail, and weighed nine to 14 kilograms (20 to 30 pounds). It had unusually large feet to wade into the swampy marshes that covered Wyoming. The animal scurried around on two muscular hind legs and used its slender front claws and spreading fingers for grasping or digging. The neck was a S-shape curve.



indicating that the adults may have banded together to protect them from predators and the environment.

"The discovery of the little dinosaur and the other animals of its time could rewrite the paleontological history of that locale," says Siegwarth. For some in the dinosaur-hunting community, Drinker Nisti is an answer to a mystery all paleontologists speculate about — why did dinosaurs become extinct?

Drinker existed from the late Jurassic to the early Cretaceous period (135 to 140 million years ago), a time when many of the larger dinosaurs were dying out, and the smaller ones were overrunning the earth. The question of course, was why.

Bakker believes the answer is the formation of land bridges. He noticed that at each theorized period of extinction at least one land bridge appeared between continents. Lowering ocean levels and new land bridges gave the dinosaurs access to one another so they could migrate and compete for one another's food and land. Species could encounter diseases to which they hadn't evolved defenses; thus, species that migrated to new continents might be unable to survive. Smaller, land-dwelling creatures (like Drinker) that did not have the size and stamina to wander far might have escaped this epidemiological holocaust.

As for Filla and Siegwarth, they are living life-long dreams come true. "I've always been fascinated by paleontology," says Filla. "When my father took me fishing as a young boy, I'd go off in search of fossils instead."

Drinker Nisti was found in herds — a number of young were at the site,



At a site close to where Drinker Nisti was found, newsman Walter Cronkite, left, listens intently as James Filla, center, and James Siegwarth, right, explain the primitive landscape in which the Jurassic dinosaurs thrived. Cronkite will be narrating a four-hour dinosaur special for Granada TV of Canada.

Consumer Corner: **Warranty Disputes**

Q. I've had a problem with the transmission in my new car, but the service center at my dealership can't seem to find it. They keep telling me there is no problem, but I know it exists. The car is under warranty now, but that will end in a couple of months. Do I have any recourse if the transmission fails after the warranty runs out?

A. Document the problem NOW. Check your previous repair orders to see if your requests to look for the transmission problem were noted. Make sure your requests to repair the transmission are noted on any future service orders while the car is still under warranty. Write down the dates and names of service people you talked to for every attempt you have made to solve the problem to date. Contact the manufacturer's zone representative to see if someone from the factory can look at the car to locate the problem.

If you can show that the problem began while the car was under warranty and you have proof that you tried to resolve the matter during that time, you have a much better chance of being compensated for repairs once the warranty runs out. There is no guarantee, however, that the manufacturer will cover out-of-warranty repairs.

In general, you should take the following steps to resolve problems with new cars:

- Try to resolve it with the manager, owner, or service manager at the dealership.
- Contact the manufacturer's zone office to ask for a factory rep to look at the problem.
- Ask the zone office for information about the third-party arbitration program they use and request arbitration.
- Ask your state attorney general's office about your state's lemon law, whether your car qualifies, and how to exercise your rights under the law.

Q. I have some questions about bank certificates of deposit (CDs). What laws govern penalties imposed for early withdrawal of funds from CDs? Who enforces them? If I take a loss and have to pay early withdrawal penalties, can I deduct those charges on my federal income tax form?

A. We've learned from the Federal Reserve Board that Regulation D requires banks to impose a penalty if funds are withdrawn within six days of deposit. There are no caps or ceilings on the amount that can be charged as a penalty for early withdrawal of funds, nor are there requirements that penalties be charged after six days, since deregulation has eliminated many restrictions previously in place.

Regulation Q requires banks which are members of the Federal Reserve to give consumers clear and conspicuous notice of penalties for early withdrawal or payment of interest in their advertising. And when you sign the contract for the CD, you must be given a written statement of the effect of the early withdrawal penalty. The burden is on the consumer, however, to find out what the penalties will be for the various CDs available, so do your homework before you sign.

The Federal Reserve can impose charges on member banks for violating the regulations. If problems persist, the laws will be enforced through the appropriate regulatory agency. Those agencies, such as the Federal Deposit Insurance Corporation (FDIC), Office of Thrift Supervision (OTS), or the National Credit Union Administration (NCUA), may have other regulations which apply to CDs. A few states have Truth-in-Savings laws which might have provisions which apply, so contact your state banking authority for more information.

Losses due to penalties for early withdrawal of funds on CDs could be subtracted from your gross income on line 28 of the 1990 1040 tax form.

They aren't part of itemized deductions. You can expect the same for the 1991 tax year.

Q. It used to be that telemarketers would ask for your credit card number for payment of products, but one asked me for my checking account number the other day. I didn't give it to him, but I can't understand how they can get my money with just the account number. What gives?

A. This sounds like the new demand draft scam used by some telemarketers. Your personal checks are a type of demand draft. In this scam, sellers essentially use your account number and write up their own checks (made out to themselves) without your signature, using magnetic ink which is machine readable. Since they are read by machine, each check will get paid by the bank unless someone looks for a signature on each individual check. Banks are responsible for seeing that the drawer's signature is correct. If the bank can show that the consumer authorized the check, then bank doesn't have to reimburse the customer. The consumer is not liable if the draft is not signed and the problem is reported within a reasonable amount of time.

Telemarketers could also debit your account electronically if they have your account number. Recurring electronic debits to your account, like automatic mortgage payments, require your written authorization (under Regulation E, based on the Electronic Funds Transfer Act), but a single automatic debit transaction does not. Consumers must report any unauthorized transfers to their bank within 60 days of receiving their statement to prevent liability for the charges. Some states also have their own Electronic Funds Transfer (EFT) acts which could apply. If the laws differ, the consumer gets the benefit of the stricter law.

ComTrain: An Education Program For Adults

Most Commerce agencies and many department field offices have educational partnership programs with local schools. But the ComTrain program sponsored jointly by MBDA and NTIA is unique because it deals with "higher" education — for adult business

people branching out into radio and television station ownership.

ComTrain, now celebrating its first anniversary, helps new owners of minority stations improve management skills and increase the economic viability of their broadcast enterprises by enlisting

the help of "corporate sponsors," that run large broadcast networks.

MBDA provides funding and NTIA's Minority Telecommunications Development Program (MTDP) offers technical help and the link to major broadcasters.

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Some Faces Behind 1,500 Presentations

Outside of the office, Commerce employees volunteer their time to church activities, charitable institutions, and community groups — an array of efforts as close to home as their front sidewalks and as far away as the ozone layer. However, at the department the vast majority of Commerce volunteer programs focus on providing educational outreach activities to the community. Through these educational partnerships, like NIST's Resource Educational Awareness Partnership, PTO's Project XL and NOAA's Satellites in Education program, Commerce employees made more than 1,500 presentations to 68,000 students last year.



David Babcock, principal of the Immanuel Christian School in Manassas, Va., accepts Safeway and Giant grocery receipts collected by NTIS employees. Next to him is Marion Gurfein, NTIS deputy associate director of marketing, who organized the drive. Safeway reimbursed the school with three computers, three printers and four software packages.



John Miller of NOAA's Air Resources Laboratory spoke to 1,500 high-school students at a Science Encounters forum sponsored by the American Association for the Advancement of Science. Not pictured is his colleague, Eileen Shea of NOAA's Climate and Global Change Program, who also participated.

More than 100 students recently visited the NOAA facility at Sand Point, in Seattle, Wash. In addition a slide presentation, the students also participated in a beach cleanup along the shoreline of the facility. The students spent their own class funds to purchase the necessary plastic bags and rubber gloves to clean up the beach. The students, ranging in age from first through sixth grades, cleaned the entire half mile shoreline of the facility, collecting over 250 pounds of garbage, including plastic bags and sheeting, styrofoam cups, a discarded fishing line, a section of an old fishing net, plastic ropes, combs, tennis balls, and a plastic boomerang.



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Once new minority station owners are accepted for ComTrain, they receive on-site training at a station owned by a corporate sponsor.

The training, which lasts 2-5 days, is under direction of the station's general manager. Sponsors also provide management consultant services once the minority-owned station is on the air.

The current sponsors are Gannett Broadcasting Group, Cabellero Spanish Media, US Radio, The Cromwell Group, Allbritton Communications, Emmis Broadcasting, Monroe Broadcasting, Granite Broadcasting Corp. and Cox Enterprises.

The sponsors donate their services, facilities and time to the program, according to Joann Anderson, director of MTDP. Although happy to volunteer for a good cause, Merrill Hanson, general manager of KUSA-AM/KSD-FM in St. Louis, Mo., found there are unexpected benefits to participating in ComTrain. "Working with the trainee brought out the teacher in us," says Hanson. "We loved sharing our craft, and it was a real morale booster for the whole station."

Mr. Squid Goes to Washington

National Marine Fisheries Service scientists know when there is a celebrity in their midst. A recently found, rare, seven-foot, 135-pound squid, identified as *teuthidina danae*, has been causing quite a stir in the mollusk-watching community. Less than a dozen of this particular type squid have ever been seen.

The squid, which is now held by the Smithsonian Institution's Museum of Natural History in Washington, D.C., was brought up off Massachusetts last December by the fishing boat *Defender*. Capt. Jimmy Dow thought the squid caught up in the net was unusual and set it aside. He brought it to the NMFS's Northeast Fisheries Center Laboratory in Gloucester.

Although the specimen is large for its type, it is not technically a giant squid. In 1962, a 60-foot giant squid washed up on the beaches of Plum Island, Mass., setting a record for squid size.

Nevertheless, Chris Martin, a staff scientist at NMFS, took one look at Capt. Dow's find, realized the squid was

rare, and thought it should be displayed. He contacted the NMFS National Systematics Laboratory, located in the Museum of Natural history, to see if they would be interested in the specimen for their collection. They were.

Martin constructed a styrofoam-lined crate that would keep the animal frozen during transit, and the squid was chauffeured to Washington by the museum's curator of mollusks, Clyde Roper.

"It's really a beautiful animal," Roper said. "It is about at the maximum limit for size of its kind. Usually we only find remains of them in the bellies of sperm whales."

The squid has a long muscular body, short tentacles dotted with tiny sharp hooks, and two "flashlight" organs on its arms.

Because it is rarely caught, little is known about *teuthidina*. "Squid are very sensitive animals and can sense nets coming" says Roper. "They're great at escaping capture."

WANTED: Commerce News

Commerce People is for and about Commerce people activities. We rely on you - Commerce employees - to help keep us informed about what's happening in your part of the department. If you have a story idea, please let us know!

Perhaps a coworker has done something special, and deserves recognition. Or maybe you or your department have won an award and would like to tell us about it.

Due to space limitations, we can't promise that we will use every idea, but we invite you to submit them for consideration. Black and white photos are welcome. No polaroids, please.

We would really like to hear about what's happening in your corner of Commerce!

Send your story ideas to Editor, COMMERCE PEOPLE, U.S. Department of Commerce, HCHB - Room 5058, Washington, D.C. 20230.

Personnel Dialogue: **SES Recertification**



By Elizabeth Stroud
Director of Personnel

Q. I am a career Senior Executive and I have heard that we are going to be subject to a new process called recertification. Why is this necessary when there is already an annual performance appraisal?

A. The annual appraisal looks at how well the executive has met the specific standards for his or her position for the appraisal year. Recertification looks at performance over a period of three years.

Q. I have been in the Senior Executive Service for approximately two years. Does this mean I can't be recertified?

A. The recertification process covers only career SES members who have served continuously in the SES for at least 156 weeks prior to the end of the recertification period. The first recertification process must be completed by the end of calendar year 1991. The next recertification will not take place until 1994. If you are not covered this time, you will not be subject to the recertification process until 1994.

Q. I participate in the Thrift Savings Plan (TSP). I want to change the amount I contribute and would like to invest in a different fund. How would I do this?

A. To change the amount or the investment option of future contributions, you must complete an Election Form, TSP-1. You may change future contributions only during TSP open seasons, which are held twice a year: May 15 through July 31, and Nov. 15 through Jan 31.

To change existing account balances to a different investment fund and/or redesignate amounts allocated to each fund, you must complete an Interfund Transfer Request, TSP-30. You may make up to four interfund transfers per calendar year, at any time during the year.

For example, if you currently contribute 4 percent into the G Fund, but want to contribute a total of 5 percent, with 2 percent to the G Fund, 2 percent to the C Fund, and 1 percent to the F Fund, you must file a form TSP-1 during open season to increase your contribution to 5 percent and to specify where you want your 5 percent to go. This election will affect contributions you make after the TSP-1 goes into effect. If you want to redesignate where you want the money which you already have in your account to go, you must file a form TSP-30 and specify 2 percent to the G Fund, 2 percent to the C Fund and 1 percent to the F Fund.

Both the Election form, TSP-1, and the Interfund Transfer Request, TSP-30, can be obtained from your personnel office, as well as additional information and assistance.

Q. If a person accepts a position with the understanding of being eligible for promotion upon completion of one year of satisfactory performance and then does not get promoted, what are his or her options?

A. In general, an employee has no right to a promotion, and it is not a useful practice for a supervisor to enter into an informal "understanding" which could be viewed as a commitment. A supervisor may advise an employee that there is reasonable expectation of promotion under certain conditions, such as a satisfactory performance.

However, the employee should also be advised that there is no promise of a promotion, since circumstances (such as a freeze on promotions, reorganization, the employee's failure to perform higher-graded duties satisfactorily) may result in the employee not getting promoted, or getting promoted later than expected.

Failure to receive a promotion is not grounds for grievance in itself, but some aspects of nonpromotion may be under the department's administrative grievance procedure. If an employee is dissatisfied about not getting promoted, there are several lines of recourse available. If the classification of the employee's duties is at issue, the employee should file a classification appeal. If the employee believes the nonpromotion is based on discrimination, he or she may file a discrimination complaint. If you would like advice on your particular situation and the recourse available, contact your personnel office.

Commerce People

Published monthly for employees of the U.S. Department of Commerce by the Office of Public Affairs (OPA), Office of the Secretary.

Letters should be addressed to Erika Morphy, U.S. Department of Commerce, Room 5058, Herbert C. Hoover Building, Washington, D.C. 20230.

News items may be mailed, or phoned in to the editor on FTS 377-4901.

Malcolm Barr.....Act. Dir. OPA
Robert KaylorOPA
Erika MorphyEditor

Personnel Notes: SMART

Under the Commerce employee suggestion program, SMART (Save Money and Reduce Taxes), employees may receive cash awards for innovative, creative ideas which improve working conditions or operating methods, speed up production, conserve materials or property, and save money. Over the past four years, Commerce employees have submitted 1,950 suggestions. Thirty percent of those suggestions have been adopted, resulting in first-year savings of over \$1.4 million for the department.

To submit a written suggestion, use the following guidelines:

- Concentrate on what you know best. The best place to look for ideas is in your own office.
- Choose a situation that needs improvement. A high volume job, time-consuming tasks and energy-wasting jobs are good candidates for improvement.
- Get the Facts. Know the answers to such questions as what exactly causes the problem and how much time is spent on this particular job.

- Turn loose your imagination. Suggest as many solutions as possible. Be creative and resourceful. Don't limit yourself by thinking there is only one way to do something. Make a list of all possible improvements.

- Write your suggestions. Submit a well-organized, clear, and complete written statement of your idea and its expected benefits. Make sure you identify any savings in time, labor, equipment, materials, space, etc. If possible, turn the savings into a dollar amount. Be sure to point out who will benefit and how.

To submit your suggestion you should get a form CD-36, SMART Bonus. They can be found in the suggestion boxes throughout the department or from your personnel office. Then submit the form to your suggestion program coordinator. It will be forwarded to the organization which has responsibility for the suggestion. Suggestions can be submitted at any time during the year. If the suggestion is adopted, an employee is eligible for an award ranging from \$25 to \$25,000.

New Social Security Tax Regulation

Federal employees are required by law to pay Social Security taxes, which are computed as a percentage of gross wages (base pay, cash awards, premium pay, etc.). Social Security consists of two parts: (1) Old Age, Survivors, and Disability Insurance (OASDI) and (2) Medicare or Hospital Insurance Tax (HIT). Depending on your retirement coverage, you are taxed for only HIT (employees under Civil Service Retirement System) or both OASDI and HIT (employees under Federal Employees Retirement System).

The Budget Reconciliation Bill of 1990 increased both the OASDI and HIT tax base. For the 1991 taxable year, OASDI is deducted at the rate of 6.2 percent up to the wage base of \$53,400 and HIT is deducted at the rate of 1.45 percent for your full salary. **THIS IS A CHANGE FROM LAST YEAR.** By this time of year,

employees subject to OASDI in a high wage bracket or who regularly receive additional pay (overtime, standby pay, differentials, etc.) will be nearing or have already met the taxable wage base for OASDI. Once the

taxable wage base is met, the OASDI portion of their social security deductions will automatically stop.

For additional information on Social Security taxes, contact your personnel office.

Voluntary Community Service: Commerce Makes It Easy For Employees To Do Their Part.

Many Commerce employees volunteer their time to charitable programs that benefit the needy. Many more would like to, but it is difficult to find the time in a busy schedule.

Employees who wish to participate in volunteer activities during normal working hours should investigate their options. Some operating units have the flexibility (after consideration of work requirements) to approve alternate work arrangements. There is also the option of using annual leave or leave without pay.

Your personnel office can answer questions about personnel issues that arise in relation to volunteer activities.

NOAA Official Sanguine About One-Man Drive

On March 22, R.V. Miller, deputy director of the National Marine Mammal Laboratory in Seattle, Wash. donated his 100th pint of blood.

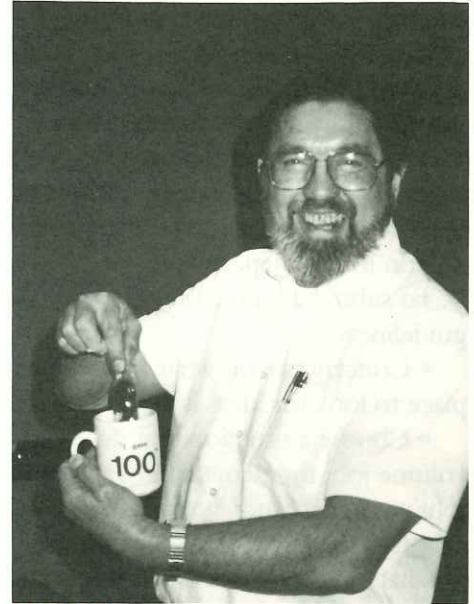
Miller began his self-described "bloody career" in Ithaca, N.Y., 33 years ago when a friend talked him into donating blood. "Since then, I've spilled blood in some of the finest blood banks across the nation," Miller says, "From Solomons, Md., to Dade County, Fla.; from Fayetteville, Ark., to Rochester, N.Y.; and a gallon all together at the National Red Cross in Washington, D.C."

For the past 11 years, Miller has been giving blood to the Puget Sound Blood

Program during bloodmobile visits to NOAA's Sand Point complex in Seattle.

"Giving blood is easy," says Miller. "It hardly ever hurts, except when they jab your finger for the drop needed for the hematocrit test. They provide good beverages and cookies afterward, and it makes you feel good to know you are helping someone else." Blood drives are extremely important because of a continuous need for blood for traumatic injury cases, surgery, and treating blood diseases, Miller says.

During the Puget Sound bloodmobile visit on June 12, Miller started working on his second 100 pints of blood.



R.V. Miller.



Milan Dhir performs a dance of a gypsy woman enticing her beloved to take her to the seasonal fair.

MBDA Observes Asian/Pacific American Heritage Month

MBDA sponsored a series of activities to celebrate Asian/Pacific American Heritage Month.

The month was established by President Bush to celebrate the outstanding contributions Americans of Asian and Pacific descent have made to American history. "This country's westward expansion and economic development were greatly influenced by thousands of Chinese and other Asians who immigrated during the 19th century," said the president. "Today, recent immigrants from South Asia are giving our nation new appreciation for that region of the world."

The Asian/Pacific American heritage is marked by a wealth of ancient art and philosophy, fine craftsmanship, colorful literature, and folklore that has sprung from Asia and the Pacific Islands. Commerce employees got a small glimpse of this history at the MBDA-sponsored pageant held in the Herbert Hoover auditorium. Among the performers was Milan Dhir, a classical Indian dancer whose father works in the department.